

CLAIMS

1. Method of reducing the cross-talk between a data signal (HF) and an input push-pull signal (PP), for generating an output push-pull signal (IPP), said method comprising :

5 - a convolution step for convoluting said data signal (HF) with a filter (F), for generating a first intermediary signal,

 - a multiplication step for multiplying said first intermediary signal to an adaptive scaling factor (α), for generating a second intermediary signal,

 - a subtracting step for subtracting said second intermediary signal to said input push-pull signal (PP), for generating said output push-pull signal (IPP).

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2. Method as claimed in claim 1 where said adaptive scaling factor (α) is defined so as to minimize a cost function (J) that indicates the amount of data to push-pull cross-talk.

15 3. Method as claimed in claim 1 where said adaptive scaling factor (α) is derived from a look-up table (LUT) indexed with signal-to-noise ratio values of the push-pull signal (PP).

20 4. Method as claimed in claim 2 or 3 comprising sampling steps (SRC1, SRC2) for sampling said data signal (HF) and said input push-pull signal (PP) at a frequency (f_c) lower than the channel bit rate (f_b) of the data signal (HF).

25 5. Method as claimed in claim 4 where the filter (F) is defined by [1 0 -1].

6. Device for reducing the cross-talk between a data signal (HF) and an input push-pull signal (PP), for generating an output push-pull signal (IPP), said method comprising :

- convolution means for convoluting said data signal (HF) with a filter (F), for generating a first intermediary signal,

- multiplication means for multiplying said first intermediary signal to an adaptive scaling factor (α), for generating a second intermediary signal,
- subtracting means for subtracting said second intermediary signal to said input push-pull signal (PP), for generating said output push-pull signal (IPP).

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7. A computer program comprising code instructions for implementing the steps of the method as claimed in anyone of claims 1 to 5.